



**NSAI**  
Standards

Irish Standard  
I.S. EN 1749:2020

Classification of gas appliances according to the method of supplying combustion air and of evacuation of the combustion products (types)

**I.S. EN 1749:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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## National Foreword

I.S. EN 1749:2020 is the adopted Irish version of the European Document EN 1749:2020, Classification of gas appliances according to the method of supplying combustion air and of evacuation of the combustion products (types)

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EUROPEAN STANDARD

EN 1749

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2020

ICS 91.140.40

Supersedes CEN/TR 1749:2014

English Version

## Classification of gas appliances according to the method of supplying combustion air and of evacuation of the combustion products (types)

Classification des appareils utilisant les combustibles gazeux selon le mode d'amenée d'air comburant et le mode d'évacuation des produits de combustion (types)

Klassifizierung von Gasgeräten nach der Art der Verbrennungsluftzuführung und Abgasabführung (Arten)

This European Standard was approved by CEN on 13 October 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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## European foreword

This document (EN 1749:2020) has been prepared by Technical Committee CEN/TC 238 “Test gases, test pressures, appliance categories and gas appliance types”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TR 1749:2014.

The main changes compared to the previous edition are listed below:

- editorial changes, a reviewed wording and a reviewed structure compared to the TR version (CEN/TR 1749:2014);
- some technical items generally described in the foreword of the former TR are now included in the scope or in other clauses of the standard (1; 4.1; 4.4);
- a clause on normative references has been included (Clause 2);
- a clause on terms and definitions has been included (Clause 3);
- examples of reworded clauses:
  - Type B (4.3);
  - Type C6 (4.4);
  - Type C(11) (4.4);
  - Type C(13) (4.4);
  - Type C(14) (4.4).
- a key for figures has been added and some figures have been modified, according to the key adopted (Annex A);
- Annex B has a wider application than Germany. Due to this change, the former Annex D has been deleted;
- Annex C replaces the former Annex E;
- The former Annex C has been deleted.

The user is advised to compare the previous text with the current version.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North

**EN 1749:2020 (E)**

Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



## Introduction

This document has been prepared to provide reference scheme for classification of gas appliances to CEN Technical Committees who are preparing European Standards for appliances burning combustible gases.

It gives details of a general scheme for the classification of such appliances according to the method of air supply and evacuating the combustion products. This document concerns gas appliances that are intended to be installed within buildings or outside buildings. Nevertheless, it is recognized that this appliance classification scheme could be utilized in other circumstances. For example, in the case of appliances capable of utilizing other fuels.

This form of appliance classification is widely used in the preparation of European Standards for gas appliances to identify the requirements and methods of test that are applicable to the various methods of evacuating the combustion products and air supply. Appliances classified in this way are generally described as “types” and this description has been retained for the purposes of this document.

The definitions are written intentionally in very general terms in order to cover any possible variations in the basic appliance types.

The main purpose of the document is to promote harmonization in the classification of appliance types. This should ensure that there is a clear understanding of the various appliance types and will avoid confusion arising from Technical Committees describing them in different ways. CEN Technical Committees are therefore requested to use this document as reference in all circumstances in which it is appropriate. They should not deviate from it unless there are relevant technical reasons for doing so.

In the preparation of this scheme it was noted that there were methods of evacuating combustion products that were particular to a specific Technical Committee or to a particular gas appliance. These particular methods have not been included in the present scheme because, as indicated above, the main purpose of the scheme is to promote harmonization across Technical Committees.

However, it is intended that this scheme should be reviewed from time to time in order to consider its extension to other, possibly new, methods of evacuating combustion products. At that time, such specific methods of evacuating combustion products may be included at the request of the Technical Committees concerned.

## EN 1749:2020 (E)

### 1 Scope

This document gives details for the classification of gas appliances according to the method of supplying combustion air and of evacuating the combustion products (types). This classification refers to gas appliances that are intended to be installed within buildings and/or outside of the building<sup>1</sup>.

The document classifies appliances as type A, B or C according to the basic principle for the evacuation of the combustion products and air inlet.

This document is the reference for the harmonization of product standards, for the preparation of installation standards and for the common understanding of the types of gas appliances.

This document is neither an installation standard nor a product standard.

In references to a gas appliance or gas appliances connected via “**its**” or “**their**” duct or ducts, it is intended that the air inlet duct and/or the discharge duct for carrying any combustion products are part of the gas appliance. This means that such ducts are certified together with the gas appliance. Informative Annex C identifies appliance types that are designed for connection to separate chimney products, which may be part of the construction of the building.

In terms of this document, a “**single duct**” is a flue duct designed and capable of discharging the combustion products and/or air inlet duct for the air supply for only one appliance.

In terms of this document, a “**common duct**” is a flue duct designed and capable of discharging the combustion products and/or air inlet duct for the air supply for more than one appliance.

### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp/ui>

### 4 General scheme

#### 4.1 General

The general scheme for Type A, Type B and Type C appliances is given in 4.2, 4.3 and 4.4 respectively.

A series of subscript numbers is used in addition to these letters to identify specific variations within these basic principles.

Where this first subscript number exceeds “9” it is given in brackets to clarify that it is a single subscript number and not two subscript numbers.

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1) If the appliance is installed outside of the building (if this circumstance is explicitly allowed by the manufacturer) it will not change its classification (i.e.: a type B<sub>53</sub> appliance will remain a type B<sub>53</sub> if installed outside according to manufacturer instructions). These appliances are subject to specific additional requirements and tests, according to specific product standards.

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